

IN-HOUSE-BUILT AND/OR NON-NRTL/MODIFIED NRTL-LISTED ELECTRICAL EQUIPMENT APPROVAL FORM

SECTION 1 - Information		
Group:	Responsible Person: (optional)	Employee#: (optional)
Equipment Name: __Multiple __Single		
Manufacturer:		
Model Number:		
Serial number(s) of piece of equipment actually evaluated:		
Property number(s) of piece of equipment actually evaluated:		
Location: Building:		Room Number:
Identify Equipment Status: __New __Modified __Not Previously Approved __In Use		
Equipment Type: __Stand-alone custom built or other __System __Powered rack __Appliance/electrical tools __Powered workbench __Extension cord/relocatable power taps __Other:		
Function and Use (duty cycle):		
Operating Environment: __Indoor/dry __Outdoor/wet/damp __Flammable vapor/dust/debris __Explosives power/solid		
SECTION 2 – External Inspection (mark yes, no, NA and/or comments as necessary)		
A. Enclosure:	E. Foreign Power Supplies and Equipment:	
Operator not exposed to any hazard:	Connected to facility power with appropriate adapters:	
Not damaged:	Correct voltage, frequency, and phasing:	
Appropriate Material:	Correct wire ampacity for U.S. use:	
B. Power Source – Cord and plugs:	F. Overcurrent Protection:	
Proper voltage and ampacity rating for plug and cord:	Overcurrent protection: Equipment Branch Circuit:	
Grounding conductor included if required:		
Not frayed or damaged:	Hazards, including stored energy:	
Proper wiring of plug:	Power requirements (voltage, current, frequency)	
Strain relief on cord:	Restriction and limitations of use::	
	Make/Model/Drawing number:	
C. Power Source – Direct wired into facility	G. Marking Requirements:	
Proper voltage and ampacity rating for wiring method:		
NA:	Documentation adequate:	
Installation according to NEC:	Procedures to use (IWD):	
Proper loading and overcurrent protection in branch circuit:	Training and qualification to use:	
D. Grounding:	H. Other Requirements:	
Ground from cord or other is properly terminated:	Documentation adequate:	
	Procedures to use (IWD):	
All non-current carrying exposed metal is properly bonded:	Training and qualification to use:	
	I. Secondary Hazards:	
All non-current carrying internal subsystems are properly bonded:	RF hazards: Yes No	
Equipment ground is run with circuit conductors:	DC electric or magnetic fields: Yes No	
Auxiliary ground permitted: Check Termination:	IR, visible, or UV: Yes No	
	X-rays: Yes No	
	Fire, electrical explosion: Yes No	
	J. Existing non-approved approvals(s):	
	__CE __Other (specify):	

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SECTION 3 – Internal Inspection (mark yes, no, NA and/or comments as necessary)	
A. Internal Wiring	C. Tests Performed
Polarity correct:	Ground continuity (less than 1 ohm):
Phasing correct: :	Polarization of cord and plug:
Landing of ground correct:	Auto discharge of high voltage capacitor:
Separated - line voltage and high voltage from low voltage:	Functional test (e.g., GFCI, emergency shut-off): NA:
Wiring terminals and leads ok:	Others:
Wire sizes adequate:	
Proper dielectric:	D. Failure Analysis:
Clearance/creepage distances for high voltage ok:	Effect of ground fault:
Listed conductors, if applicable:	Effect of short circuit:
B. Other Internal Issues:	Effect of interlock failure:
Neat workmanship:	Effect of overload:
Listed components used, if applicable:	Effect of incorrect setting:
Proper management of conductors:	Others:
Free of sharp edges:	E. Maintenance:
Proper cooling:	Any safety issues with access and maintenance:
Automatic discharge of high voltage capacitor:	Explain

Condition of Usage/comments: (Include all designer/builder instructions, drawings, or information that is relevant to the safe installation and use of this equipment. Attach additional sheets as necessary.):

NOTE: APPROVED EQUIPMENT WILL BE INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED BY THE DESIGNER/BUILDER AND AHJ.

SECTION 4 - Approval

A. This equipment is APPROVED for installation and use at Virginia Tech. IF THIS EQUIPMENT IS MODIFIED, DAMAGED, OR UTILIZED FOR OTHER THAN THE INTENDED USE STATED ABOVE, THIS APPROVAL IS VOID, PENDING RE-EXAMINATION.

DATE:	Electrical Qualified Person (creator) Printed Name:	Electrical Qualified Person (creator) Signature:
DATE:	Electrical Review Printed Name:	Electrical Review Signature:
DATE:	AHJ approved -Electrical inspector Printed Name:	AHJ approved -Electrical inspector Signature

B. This equipment is REJECTED for use at Virginia Tech (see comments above).

DATE:	Electrical Review Printed Name:	Electrical Review Signature:
DATE:	AHJ approved -Electrical inspector Printed Name:	AHJ approved -Electrical inspector Signature

ATTACHMENTS:

